**Instructions: Working with Datasets, Calculating BMI, and Creating Visualizations**

**Objective:** The objective of this exercise is to work with two datasets, calculate Body Mass Index (BMI) for the matched records, and create visualizations based on the merged dataset. Then be able to present your results and walk us through your methods. This is not meant to be an overly complex task; it is so that you can demonstrate your understanding of working with multiple datasets and creating visualizations. We also want to review your code during the interview, so please demonstrate sufficient code annotation and be prepared to discuss it. Please note that this data has been randomly generated and does not necessarily reflect real world patient characteristics.

**Step 1: Download the Datasets**

Download the provided datasets: dataset1.csv and dataset2.csv.

**Step 2: Load the Datasets**

Load both datasets into your preferred data analysis environment (e.g., Python with pandas, R, or any other tool of your choice).

**Step 3: Explore the Datasets**

Take a moment to explore the structure and contents of each dataset.

Identify common fields between the datasets (e.g., record\_id) for merging.

**Step 4: Merge the Datasets**

Merge the datasets based on the common field (e.g., record\_id) to create a single, merged dataset.

Ensure that you only include matched records in the merged dataset.

**Step 5: Calculate BMI**

Calculate the Body Mass Index (BMI) using the formula:

BMI = (weight in kilograms) / (height in meters)^2

Note: Height should be converted from centimeters to meters before calculation.

**Step 6: Create Visualizations**

Create visualizations based on the matched records in the merged dataset. Feel free to use any data visualization tool other than Excel.

Examples of visualizations you can create:

* Histograms or bar plots showing the distribution of BMI.
* Scatter plots to visualize the relationship between BMI and other variables (e.g., age, blood pressure).
* Pie charts to show the distribution of certain categorical variables (e.g., race, smoking status).